

Application No. 10/815,404  
Amendment dated September 23, 2004  
Preliminary Amendment

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. A pharmaceutical composition comprising an immunogenic A $\beta$  fragment linked to a carrier molecule to form a conjugate, wherein the carrier molecule promotes an immune response comprising antibodies to the A $\beta$  fragment.
2. (Currently Amended) The pharmaceutical composition of claim 1, wherein the A $\beta$  fragment is from the N-terminal half of A $\beta$ .
3. (Currently Amended) The pharmaceutical of claim 2, wherein the A $\beta$  fragment is A $\beta$ 1-5.
4. (Currently Amended) The pharmaceutical of claim 3, wherein A $\beta$ 1-5 consists of the first five N-terminal amino acids of SEQ ID NO:1.
5. (Currently Amended) The pharmaceutical of claim 2, wherein the A $\beta$  fragment is A $\beta$ 1-6.
6. (Currently Amended) The pharmaceutical of claim 5, wherein A $\beta$ 1-6 consists of the first six N-terminal amino acids of SEQ ID NO:1.
7. (Currently Amended) The pharmaceutical of claim 2, wherein the A $\beta$  fragment is A $\beta$ 1-12.
8. (Currently Amended) The pharmaceutical of claim 7, wherein A $\beta$ 1-12 consists of the first 12 N-terminal amino acids of SEQ ID NO:1.
9. (Currently Amended) The pharmaceutical of claim 1, wherein the carrier molecule is a diphtheria toxoid.

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10. (Currently Amended) The pharmaceutical of claim 9, wherein the diphtheria toxoid is CRM 197.
11. (Currently Amended) The pharmaceutical of claim 2, wherein the carrier molecule is a diphtheria toxoid.
12. (Currently Amended) The pharmaceutical of claim 11, wherein the diphtheria toxoid is CRM 197.
13. (Currently Amended) The pharmaceutical of claim 12, wherein the A $\beta$  fragment is A $\beta$ 1-5.
14. (Currently Amended) The pharmaceutical of claim 13, wherein A $\beta$ 1-5 consists of the first five N-terminal amino acids of SEQ ID NO:1.
15. (Currently Amended) The pharmaceutical of claim 12, wherein the A $\beta$  fragment is A $\beta$ 1-6.
16. (Currently Amended) The pharmaceutical of claim 15, wherein A $\beta$ 1-6 consists of the first six N-terminal amino acids of SEQ ID NO:1.
17. (Currently Amended) The pharmaceutical of claim 12, wherein the A $\beta$  fragment is A $\beta$ 1-12.
18. (Currently Amended) The pharmaceutical of claim 17, wherein A $\beta$ 1-12 consists of the first 12 N-terminal amino acids of SEQ ID NO:1.
19. (Currently Amended) The pharmaceutical of claim 1, which comprises greater than 10  $\mu$ g of the A $\beta$  fragment.
20. (Currently Amended) The pharmaceutical of claim 1, which comprises at least 20  $\mu$ g of the A $\beta$  fragment.

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21. (Currently Amended) The pharmaceutical of claim 1, which comprises at least 50  $\mu\text{g}$  of the A $\beta$  fragment.

22. (Currently Amended) The pharmaceutical of claim 1, which comprises at least 100  $\mu\text{g}$  of the A $\beta$  fragment.

23. (Currently Amended) The pharmaceutical of claim 10, which comprises greater than 10  $\mu\text{g}$  of the A $\beta$  fragment.

24. (Currently Amended) The pharmaceutical of claim 10, which comprises at least 20  $\mu\text{g}$  of the A $\beta$  fragment.

25. (Currently Amended) The pharmaceutical of claim 10, which comprises at least 50  $\mu\text{g}$  of the A $\beta$  fragment.

26. (Currently Amended) The pharmaceutical of claim 10, which comprises at least 100  $\mu\text{g}$  of the A $\beta$  fragment.

27. (Currently Amended) The pharmaceutical of any one of claims 2, 3, 5, or 7, which comprises greater than 10  $\mu\text{g}$  of the A $\beta$  fragment.

28. (Currently Amended) The pharmaceutical of any one of claims 2, 3, 5, or 7, which comprises at least 20  $\mu\text{g}$  of the A $\beta$  fragment.

29. (Currently Amended) The pharmaceutical of any one of claims 2, 3, 5, or 7, which comprises at least 50  $\mu\text{g}$  of the A $\beta$  fragment.

30. (Currently Amended) The pharmaceutical of any one of claims 2, 3, 5, or 7, which comprises at least 100  $\mu\text{g}$  of the A $\beta$  fragment.

31. (New) The pharmaceutical composition of claim 1, wherein the conjugate is expressed as a fusion protein.

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32. (New) The pharmaceutical composition of claim 31, wherein the amino terminus of the A $\beta$  fragment is linked to the carrier molecule.

33. (New) The pharmaceutical composition of claim 31, wherein the carboxyl terminus of the A $\beta$  fragment is linked to the carrier molecule.

34. (New) The pharmaceutical composition of claim 1, wherein the A $\beta$  fragment is linked to the carrier molecule by chemical crosslinking.